27 September 1957

Brig. Gen. Don Flickinger Headquarters, ARDC Baltimore, Md.

Dear Don:

We have evaluated the torch igniter that you sent us. I am serry to say that after extensive study by Pratt & Whitney and members of our staff we find it does not offer a solution to our problem of making higher altitude relights. Our problem consists primarily of flame propagation at high altitudes and low air speeds. While the torch igniter has proven itself for individual burner lighting, this does not overcome our propagation problem.

There is an additional safety hazard involved (small though it may be) of the addition of a low pressure oxygen system to the engine. In our case this system would have to be independent of the aircraft system and would be located immediately adjacent to the hot section of the engine. Experience immediately tells us that this is not desirable.

I am sorry that we have taken so long to return this material and model, but we wished to evaluate carefully all aspects of this torch igniter.

Mr. Hissell and I certainly appreciate your keeping our project in mind as you run across new pieces of equipment or have new ideas which may further our capability. Drop in and visit us at your earliest convenience.

Sincerely,

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